



Linda S. Adams
Secretary for
Environmental Protection

Air Resources Board

Mary D. Nichols, Chairman
1001 I Street • P.O. Box 2815
Sacramento, California 95812 • www.arb.ca.gov



Arnold Schwarzenegger
Governor

August 22, 2008

Mr. Glen Prisciak
Technical Support Engineer
DCL International Inc.
P.O. Box 90
Concord, Ontario, Canada L4K 1B2

Dear Mr. Prisciak:

The Air Resources Board (ARB) has reviewed the DCL International Inc. application for the verification of the Mine-X Sootfilter[®] diesel particulate filter (DPF) system. Based on the evaluation of the data provided, the ARB hereby verifies that the Mine-X Sootfilter[®] DPF system reduces emissions of diesel particulate matter (PM) by 85 percent or greater and meets the January 2009 NO₂ limit (Level 3 Plus) for stationary prime and emergency standby (E/S) generators powered by certified Tier 1, Tier 2, or Tier 3 off-road engines certified to a PM emission limit of less than or equal to 0.15 grams per brake horsepower hour (g/bhp-hr). The Executive Order for the Mine-X Sootfilter[®] DPF system, including a list of the applicable engine families, is enclosed.

The required emissions and durability testing of the Mine-X Sootfilter[®] DPF system were performed per the testing protocol entitled "Level 3 Verification Application for DCL International Inc.'s MINE-X SOOTFILTER[®] Diesel Particulate Filter," as approved by the ARB. As a part of the required testing, 1,000 hours of durability testing, including 72 cold starts, were completed on the system without a reduction in the effectiveness of the system, making the system eligible for verification.

The emissions and durability testing were conducted on a diesel fueled engine belonging to engine family, 3JDXL12.5035, certified by the U.S. Environmental Protection Agency to emit 0.147 g/bhp-hr, or less, of PM as tested on the ISO 8178 D2 cycle. Based on this PM emission rate, a verification is given for stationary prime and E/S generators powered by certified off-road diesel engines certified to a PM emission limit of less than or equal to 0.15 g/bhp-hr.

The energy challenge facing California is real. Every Californian needs to take immediate action to reduce energy consumption. For a list of simple ways you can reduce demand and cut your energy costs, see our Website: <http://www.arb.ca.gov>.

California Environmental Protection Agency

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The verification is valid provided the following operating criteria are met:

| Parameter | Value |
|--|--|
| Application | Stationary Prime and Emergency Standby Power Generation |
| Engine Type | Diesel, with or without turbocharger, without Exhaust-Gas Recirculation (EGR), mechanically or electronically controlled, Tier 1, Tier 2, or Tier 3 off-road engines certified to a particulate matter (PM) emission limit of less than or equal to 0.15 g/bhp-hr. |
| Minimum Exhaust Temperature for Filter Regeneration | The engine must operate at the load level required to achieve 350 degrees Celsius (°C) for a minimum of 30 percent of the engine's operating time. Operation at lower temperatures is allowed, but only for a limited duration. |
| Maximum Consecutive Minutes Operating Below Passive Regeneration Temperature | 240 minutes |
| Number of Consecutive Cold Starts and 15 Minute Idle Sessions before Regeneration Required | 16 |
| Number of Hours of Operation Before Cleaning of Filter Required | 1,000 when using Ultra Low Sulfur Diesel (<15 ppm Sulfur). |
| Fuel | California diesel fuel with less than or equal to 15 ppm sulfur or a biodiesel blend provided that the biodiesel portion of the blend complies with ASTM D6751 (15 ppm sulfur), the diesel portion of the blend complies with Title 13 (CCR), sections 2281 and 2282 and the blend contains no more than 20 percent biodiesel by volume. |
| PM Verification Level | Level 3 Plus Verification: <ul style="list-style-type: none">• PM - at least 85% reduction• NO₂ - meets January 2009 limit |

Since there may be significant variations from application to application, DCL International Inc. must review actual operating conditions (duty cycle, baseline emissions, exhaust temperature profiles, and engine backpressure) prior to retrofitting an engine with an MINE-X SOOTFILTER® DPF system to ensure compatibility.

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Furthermore, the engine on which the MINE-X SOOTFILTER® DPF system is installed should be well maintained and not consume lubricating oil at a rate greater than that specified by the engine manufacturer. DCL International Inc. must install the DCL Exhaust Monitor/Logger, or equivalent, backpressure monitor on all engines retrofitted with an MINE-X SOOTFILTER® DPF system.

ARB hereby assigns the MINE-X SOOTFILTER® DPF system the designated family name of:

CA/DCL/2008/PM3+/NOO/ST/DPF01

This identification number should be used in reference to this verification as part of the system labeling requirement.

Additionally, as stated in the Diesel Emission Control Strategy Verification Procedure, DCL International Inc. is responsible for honoring their warranty (California Code of Regulations, Title 13, section 2707) and conducting in-use compliance testing (California Code of Regulations, Title 13, section 2709).

Should you have any questions or comments, please contact Mr. Kirk Rosenkranz, Air Pollution Specialist, at (916) 327-7843 or Mr. John Lee, Air Resources Engineer, at (916) 327-5975.

Sincerely,

/s/ by Cherie Rainforth for

Daniel E. Donohoue, Chief
Emission Assessment Branch
Stationary Source Division

Enclosure

cc: John Lee
Air Resources Engineer

Kirk Rosenkranz
Air Pollution Specialist